

Enhancing Public Understanding of Science Through the BioMARS Project.

Herbert D. Thier
Planetary Sciences
University of California, Berkeley
Berkeley CA 94720
thier@berkeley.edu

Kevin E. Cuff
Planetary Sciences
University of California, Berkeley
Berkeley CA 94720
kcuff@berkeley.edu

Basic to all scientific investigation is the specification of system(s) of interest, the collection and analysis of evidence of interaction both directly and at a distance in those systems and the analysis of all data collected to identify what has and has not been learned to help inform future investigations.

Our primary goal is to use the research of BioMARS' scientists to improve the public's understanding of science as an endeavor. Thus, we have initiated the development of educational materials that use investigation and analysis of data collected on Mars and in model systems on Earth to develop participants' understanding of, interest in and application of the approach of science to their personal decision making. We are currently developing materials for use in after school programs, Middle and High School classes, and the general public designed around the following six areas:

- ♣ Investigation As a Process
- ♣ Use Of The Senses As Detectors
- ♣ Investigating Kinetic Energy Transfer and Transformations Using Light
- ♣ Investigating Metals and their Compounds
- ♣ Investigating Oxidation-Reduction Reactions Using Iron.
- ♣ Investigating Iron Oxidizing Bacteria as a Model for Possible Life on Mars

The presentation will include a discussion of our reasons for taking this approach, how each of these areas is related to the National Standards for Science Education, early reports from trial-tests in after school programs, and our plans for the future. We will also present ideas regarding new possible approaches to obtaining support for the dissemination of materials produced by NAI-E/PO teams.